



PORTABLE MORGUE EXPANSION CUBE (PMEC-12)

QUICK REFERENCE GUIDE

THIS MANUAL IS APPLICABLE FOR MODEL PME-12 ONLY

Paladin
An Acela Company
80 Shire Trail
Bozeman, MT 59718 USA
www.paladinprepare.com
(800) 940-0508
CAGE: 7WC08

COPYRIGHT

This manual is protected under copyright, 2022 by Acela, Inc. and may not be duplicated, in whole or in part, without the expressed written permission of Acela, Inc. All rights reserved.

This manual is printed in the United States of America.



HIGH VOLTAGE! WARNING - Your Mobile Morgue Expansion Container utilizes high voltage power to operate. *ALL REFRIGERATION UNIT COVERS AND PANELS SHOULD BE CLOSED AND SECURED AT ALL TIMES UNLESS REQUIRED TO PERFORM MAINTENANCE OR SERVICE. THE UNIT CONTAINS HIGH VOLTAGE. IMPROPER ACCESS CAN CAUSE ELECTRICUTION. MAINTENANCE SHOULD ONLY BE PERFORMED BY A LICENSED ELECTRICIAN OR REFRIGERATION EXPERT*

Introduction

OVERVIEW OF OPERATION AND UNIT DESIGN

The P MEC-12 is designed to maintain 35°F interior temperature at 90°F ambient temperatures. The unit is designed to run on 120V/15A/1P/60Hz shore power through a standard 15A plug.

120V/15A power service is required to operate the onboard refrigeration unit.

Unit maintenance is minimal and is detailed in instructions found herein and on Paladin's website at www.paladinprepare.com/support/downloads.

This manual is designed to familiarize users with proper assembly, operation, disassembly and stowage of your P MEC-12 Portable Morgue Expansion Cube

Always assemble, operate, disassemble, and stow the P MEC-12 according to instructions found herein.

THIS MANUAL IS DESIGNED TO BE USED IN CONJUNCTION WITH SAFETY WARNINGS, DECALS, PLACARDS, ETC. USERS SHOULD BE THOROUGHLY FAMILIAR WITH ALL MANUALS AND GUIDES PRIOR TO OPERATING THE P MEC-12. USERS ARE ENCOURAGED TO MAINTAIN ACCURATE MAINTENANCE LOGS.

INVENTORY

Your P MEC-12 is shipped as a complete kit. All inventory items are required to properly and safely assemble and operate the unit. Before starting assembly, ensure that the entire inventory is present and in good operating condition. Spare parts can be ordered by contacting Paladin at www.paladinprepare.com.

PN	Description	Quantity
41000	Shelf, 96x24	10
41001	Shelf, 96x16	10
41002	Leg, 7"	18
41003	Leg, 16"	98
41004	Leg, 22"	34
41005	Leg Bases	130
41006	Shelf Caster (with Adapter and Brake)	8
41007	Shelf Caster (with Adapter)	8
42000	Insulated Panel Kit (6 Panels)	1
42001	Equipment Storage Covers	3
42002	Zipper Pulls	4
43000	TempStick® Remote Temp. Monitoring Sensor	1
43002	Insulated Duct Hose	2
43004	3/4"x25' Condensate Drain Hose	1
43005	Rubber Mallet	2
43006	Flat Head Screwdriver	2
43007	Step Stool, Folding	2
43008	Loose Inventory Storage Bag	1
44000	Cadaver Trays	12
45000	Refrigeration Unit	1
45001	50' 120V/15A Heavy-Duty Power Cable	1
45002	Condensate Bucket	1
N/A	Set of User Manual, SmartTemp® and Controller Guides	1

*NOTE: THIS INVENTORY LIST ACCOUNTS FOR THE 2 EXTRA OF EACH LEG SIZE AND LEG BASES THAT ARE INCLUDED WITH ALL KITS – THEY ARE NOT REQUIRED FOR ASSEMBLY OR OPERATION

PMEC-12 OPERATION

SETUP REQUIREMENTS

Before assembling the CUBE, find an area that properly addresses:

Suitable Base – The PMEC-12 should only be setup in an area with a hard, flat, level and smooth surface. Do not set up in a soft or sandy environment.

Operational Footprint – the PMEC-12 measure approximately 84"D x 136"W x 82"H when deployed, but operation requires a space of approximately 190"D x 136"W x 82"H to facilitate loading and unloading of the unit.

Indoor/Outdoor Use – The PMEC-12 is designed to be used indoors. The unit can be used outdoors if it is protected from direct sunlight and precipitation and ambient temperatures do not exceed 90°F (32°C).

Weight Capacity – the PMEC-12 weighs approximately 1,500 pounds (680 Kg) and is rated to hold an additional 8,000 lbs. - typical setup will weigh under 5,000 lbs. total. Be sure to setup in an area that is rated for these weights.

Ventilation – The PMEC-12 refrigeration unit will generate heat when operating. Be sure to set up in a well ventilated and/or air-conditioned area to prevent excessive heat buildup. Maintaining an ambient temperature of 70°F (21°C) or lower is optimal.

Drainage – The PMEC-12 is equipped with a condensate drain. In most applications very little if any condensate will drain from the unit. However, in certain applications, such as high humidity, the unit may drain a considerable amount. This is normal. Be prepared to capture or drain condensate as required.

Power – The PMEC-12 operates on standard, household 120V/15A power/circuit. Be sure that an outlet is located within 50-feet of the refrigeration unit deployed location. In certain operating conditions, the unit will pull the maximum amperage for the circuit so be sure that it is the only device powered from that circuit.

Remote Monitoring – The PMEC-12 comes with a Wi-Fi enabled remote temperature monitoring system. If its use is desired, the unit must be placed in an area with good Wi-Fi coverage and the user must know the Wi-Fi login credentials and access the sensor through Wi-Fi enabled phone, tablet or computer.

ASSEMBLY

Once a suitable location is identified, the CUBE can be setup using the following instruction. It is recommended that a minimum of two (2) people work in conjunction to assemble the CUBE.

**** AN ASSEMBLY VIDEO CAN BE FOUND AT www.paladinprepare.com/support/downloads ****

1. Noting all of the Setup Requirements (above), position the refrigeration unit and shelving stacks close to but not in the exact area that the CUBE will be setup. Note: refrigeration unit and shelf stacks are all equipped with casters with brakes – dislodge the brakes before moving.

2. Remove the covers from the refrigeration unit and shelving stacks, set aside.
3. Remove the cadaver trays and panels from the shelving stacks, set aside.
4. Place the floor panel on the floor where desired, paying attention to the “THIS SIDE UP” and “FRONT” marking to ensure that proper clearance for the front/loading side, the left/refrigeration unit side and access to power are maintained. NOTE: Also leave enough clearance on all sides to install the rear and side panels.
5. Remove all the shelves and legs from the shelving stacks, leaving the casters on the two (2) shelves equipped with casters. It is recommended that the shelves be leaned up against a wall.
6. Place the two shelves with casters onto the floor panel and build the shelving units as shown in **Figure 1** by installing the included legs and leg bases onto the lower shelves. Be sure to use the 16-inch (405mm) legs in all positions EXCEPT the second from the bottom. Use the 22-inch (560mm) legs for the second from the bottom (bariatric) level. While tools are not required for assembly, rubber mallets and step stools are provided for convenience and to facilitate faster setup. NOTE: ALL LEGS AND LEG BASES MUST BE FULLY INSERTED INTO THE SHELVES OR SHELVES WILL NOT LINE UP
7. Install eight (8) of the short (7-inch / 180mm) legs into the bottom of one (1) of the 16-inch deep shelves and one (1) of the 24-inch deep shelves as shown in **Figure X**. NOTE: ALL LEGS AND LEG BASES MUST BE FULLY INSERTED INTO THE SHELVES OR SHELVES WILL NOT LINE UP
8. Position the shelves with casters in their approximate operational positions according to **Figure 1**. Place the two shelves with the short legs in their operational position. Make any adjustments required to ensure that all four (4) shelving units fit inside the floor panel envelope and are very tight to each other.
9. Remove the shelves with the short legs and engage the brakes on the casters while the shelves with casters are still in their operational position.
10. Replace the two shelves with short legs onto the floor panel, in their operational positions and build the shelving units as shown in **Figure 1** by installing the included legs and leg bases onto the lower shelves. Be sure to use the 16-inch (405mm) legs in all positions EXCEPT the second from the bottom. Use the 22-inch (560mm) legs for the second from the bottom (bariatric) level. While tools are not required for assembly, rubber mallets and step stools are provided for convenience and to facilitate faster setup. NOTE: ALL LEGS AND LEG BASES MUST BE FULLY INSERTED INTO THE SHELVES OR SHELVES WILL NOT LINE UP
11. If desired, insert trays into their positions (not required)
12. Slide the top panel onto the top of the shelving units paying close attention to the “THIS SIDE UP” and “FRONT” markings.
13. Install the rear panel by positioning properly according to the “THIS SIDE IN” and “TOP” markings by carefully and neatly aligning the top Velcro strip of the rear panel with the Velcro strip on the top panel first and then the lower Velcro strip of the rear panel with the Velcro strip on the floor panel. MAKE SURE THE ENTIRE VELCRO STRIP HAS BEEN MASSAGED FOR A TIGHT FIT
14. Install the side panels in the same way while additionally aligning and securing the side Velcro strips
15. Install the front panel using the same method as the side panels – ensuring that the zippered doors are in line with or immediately below (1/2-inch max) their corresponding shelves
16. Check all Velcro seams for a flat, tight fit.
17. Fully close all zipper doors
18. If remote temperature monitoring is desired, enable the temperature sensor by removing it from the inside of the intake flange on the refrigeration unit, open the battery door, remove the batteries and replace them in the proper configuration (as shown on the inside of the

battery tray) and secure with Velcro fastener. Follow the TempStick ® 3-Step Quick Setup guide instructions (below) to configure the sending unit, Wi-Fi connection and the accompanying app.

19. Position the refrigeration unit as shown in **Figure 2**
20. Loosen the storage cord, extend and secure both ends of the duct hoses to the refrigeration unit and duct panel using the built-in cam straps. Supply side should be connected to the upper flange, Return side should be connected to the lower flange. Be sure to slide the duct hose ends as far over the each of the flanges as possible. Secure the black side of each duct hose to the refrigeration unit. Ensure the hoses are not kinked.
21. Place the small bucket under the condensate drain and monitor frequently or attach a garden hose and drain the condensate at a remote area.
22. Plug the refrigeration unit into its power source.
23. Properly fold and stow covers, tools, storage bag and miscellaneous inventory items in a safe place for use after disassembly.

OPERATION

1. After assembly is complete, power ON the refrigeration unit. The refrigeration unit should be preset to 35°F (1.7°C). Adjust refrigeration unit temperature as desired according to the refrigeration unit controller directions (below and in the documents storage box).
2. Load and unload the CUBE by unzipping desired door. Remains can be identified by using the clear label holders on the doors. Label holders can also be used to identify specific hazards (i.e., CBRNE, contaminants, disease, etc.) NOTE: CLOSE DOORS AS QUICKLY AS POSSIBLE AND LEAVE TIGHTLY ZIPPED CLOSED EXCEPT WHEN ABSOLUTELY NECESSARY
3. Loading and unloading can be more safely facilitated using Paladin's optional cadaver lifts.
4. Store cadavers on provided trays only, and ALWAYS in liquid tight body bags.
5. Always load and maintain the center two rows first, then bottom row, then top row.
6. IMPORTANT: THE CUBE MUST BE DISINFECTED WITH AN APPROPRIATE NON-CHLORINE-BASED FOGGING AGENT AT LEAST EVERY 30 DAYS (MINIMUM). PALADIN RECOMMENDS USING ONE (1) 8-OUNCE CAN OF SaniGuard® TOTAL RELEASE. FOGGER SHOULD BE PLACED ON THE SECOND FROM THE TOP SHELF ON RIGHT SIDE (POSITION #6), WHEN THE #3 STORAGE POSITION IS EMPTY (IF POSSIBLE), WHILE REFRIGERATION UNIT IS RUNNING. IF CUBE IS OCCUPIED, ENSURE BODIES ARE IN LIQUID TIGHT BODY BAGS. THE USE OF CHLORINE FOGGERS WILL DAMAGE UNIT AND VOID WARRANTY.
7. **The PMEC-12 is designed to run continuously without any maintenance other than XXXXXXXXXXXXX**
8. Check regularly to ensure that all panel Velcro seams are smooth and tight.
9. Do not allow direct sunlight to shine on the CUBE or the refrigeration unit when operating.

DISASSEMBLY

IMPORTANT: IT IS REQUIRED THAT ALL PANELS, SHELVEING, CADAVER TRAYS LEGS AND LEG BASES BE THOROUGHLY CLEANED, PROPERLY DISINFECTED WITH A CHLORINE-FREE SPORICIDAL CLEANER, AND DRIED BEFORE STOWING. A PLAN SHOULD BE DEVELOPED TO DO SO BEFORE DISASSEMBLY. WEAR PROPER PERSONAL PROTECTIVE EQUIPMENT (PPE) AND FOLLOW ALL ORGANIZATIONAL BIOHAZARD PROCEDURES TO

PREVENT EXPOSURE, INFECTION AND/OR THE SPREAD OF BIOHAZARDS THAT MAY BE PRESENT.

ADDITIONALLY, THE CUBE MUST BE DISINFECTED WITH AN APPROPRIATE NON-CHLORINE-BASED FOGGING AGENT AT LEAST EVERY 30 DAYS (MINIMUM). PALADIN RECOMMENDS USING ONE (1) 8-OUNCE CAN OF SaniGuard® TOTAL RELEASE. FOGGER SHOULD BE PLACED ON THE SECOND FROM THE TOP SHELF ON RIGHT SIDE (POSITION #6), WHEN THE #3 STORAGE POSITION IS EMPTY (IF POSSIBLE), WHILE REFRIGERATION UNIT IS RUNNING. IF CUBE IS OCCUPIED, ENSURE BODIES ARE IN LIQUID TIGHT BODY BAGS. DISINFECT THE CUBE USING A FOGGER IMMEDIATELY BEFORE DISASSEMBLY. THE USE OF CHLORINE FOGGERS WILL DAMAGE UNIT AND VOID WARRANTY.

1. Turn off the refrigeration unit from the control panel and unplug the refrigeration unit.
2. Remove the condensate pan, bucket or hose.
3. Remove the duct hoses, retract them fully and tie with storage cords attached.
4. Turn off the remote temperature monitoring sensor by removing it from the inside of the intake flange on the refrigeration unit (it is attached with Velcro), remove the batteries and replace them into the battery tray in the OPPOSITE direction as shown inside the battery tray, replace the battery door and secure the sender to the refrigeration unit flange with the Velcro fastener.
5. If necessary, move the refrigeration unit out of the way to disassemble the CUBE
6. Remove the front, rear, and side panels
7. Remove the top panel
8. Disassemble all shelves

AFTER CLEANING, DISINFECTING, AND DRYING ALL CUBE COMPONENTS:

9. Stow all loose inventory in the storage bag provided. **Place the bag on top of the refrigeration unit**
10. Starting with one (1) 16-inch and one (1) 24-inch shelves, fitted with eight casters each in each of the outboard positions, randomly install a minimum of two (2) leg bases (spaced apart from each other, on opposite sides of each other) and stack all of the same-sized shelves, each with randomly placed leg bases. NOTE: LEG BASES CANNOT BE POSITIONED IN THE EXACT SAME PLACE ON TOP OF OR BELOW EACH OTHER. THIS IS WHY THEY ARE TO BE PLACED RANDOMLY WHILE STACKING SHELVES.
11. **STOP stacking shelves when you have one (1) 16-inch shelf left unstacked and two (2) 24-inch shelves. When shelves are stacked with leg bases (and three shelves remain, insert eight (8) 22-inch legs with bases in the outboard positions.**
12. **Fold four of the side panels and neatly stow them in between the 22-inch legs**
13. **Add another eight (8) 22-inch legs to the stack of 24-inch shelves**
14. **Fold the top panel and floor panel and neatly stow them in between the top set of 22-inch legs**
15. **Add the last loose 24-inch shelf to the stack of 24-inch panels.**
16. Stack the cadaver trays on top of each other and place on top of 24-inch shelving stack. Secure to bottom of the lowest shelf using the ratchet straps provided.
17. Place the provided covers over each of the shelving stack and the refrigeration unit.
18. Stow all equipment, with covers on, in a dry environment free of rodents and insects, engage caster brakes if desired.
19. Inspect all equipment periodically for proper stowage, damage, rodents or insects.

REFRIGERATION UNIT

The onboard refrigeration unit is controlled by a controller located on the exterior of the refrigeration unit. Once proper power is supplied to the refrigeration unit, temperature can be set and read from the control panel. Temperature should be set to 35°F (1.6°C). The refrigeration unit should be turned off whenever it is not in use.

REMOTE TEMPERATURE MONITORING / ALARMS

System temperature can be displayed remotely on a smartphone or tablet. Alarms can be set to notify users when temperatures are out of a specified range. Remote temperature monitoring requires Wi-Fi (with password) and an app. Detailed instructions regarding setup can be found in the TempStick® 3-Step Quick Setup guide below.

DOCUMENTS

A document box, located on the side of the refrigeration unit, houses all manuals, guides and maintenance logs. Replacement parts and optional accessories can be ordered by calling Paladin at (800) 940-0508.

Setup video and PDF versions of all manuals can be downloaded from:
www.paladinprepare.com/support/downloads.

MAINTENANCE

The PMEC-12 requires very little maintenance. Maintenance is limited to:

- Maintain refrigeration unit according to manufacturer's instructions
- Inspect and maintain/replace power cables and door seals as required
- Take care to ensure panels are secured and do not get ripped, torn or rubbed on.

STOWING EQUIPMENT

The PMEC-12 was designed to safely stow all equipment provided. Follow all Disassembly and Stowing instructions carefully

LONG TERM STORAGE

When storing the unit for long periods of time:

- Check refrigeration system for proper performance
- Thoroughly clean, disinfect all cadaver tray, panel and shelving surfaces, accessories, parts, etc. – use approved cleaners
- Allow interior and all items to dry completely before folding or stowing
- Check that all inventory is present and properly stowed
- Properly stow power cables – ensure that they are in good operating condition
- Make any repairs as necessary

TROUBLESHOOTING

Almost all potential issues can be identified from the control panel.

SUPPLIES, PARTS AND SERVICE

Replacement and maintenance parts and supplies are available by calling (800) 940-0508

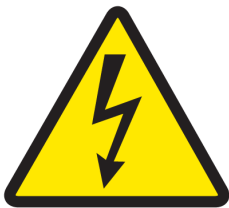
All manuals, guides and logs can be downloaded from www.paladinprepare.com/support/downloads

OPTIONAL EQUIPMENT

- Safety-Lock tray securement system
- On-site generator
- Auxiliary generator fuel tank is available (if applicable)

Other options or customization may be available.

Please contact Paladin at (800) 940-0508 for information about optional items.



HIGH VOLTAGE! WARNING - Your Mobile Morgue Expansion Trailer utilizes high voltage power to operate. *THE POWER DISTRIBUTION BOX COVER SHOULD BE CLOSED AND LATCHED AT ALL TIMES UNLESS REQUIRED TO CONTROL REFRIGERATION UNIT, PERFORM MAINTENANCE OR TROUBLESHOOTING. THE POWER DISTRIBUTION PANEL CONTAINS HIGH VOLTAGE. IMPROPER USE CAN CAUSE ELECTRICUTION. ELECTRICAL MAINTENANCE SHOULD ONLY BE PERFORMED BY A LICENSED ELECTRICIAN*